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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Euan Christopher Smith et al.

Title: DIGITAL SIGNAL PROCESSING METHODS AND APPARATUS

Docket No.: 1365.105US1

Serial No.: 10/578,659 ✓

Filed: May 9, 2006 ,

Group Art Unit: Unknown

Examiner: Unknown

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

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 Information Disclosure Statement (2 pgs.), Form 1449 (3 pgs.), and copies of 29 cited documents.

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
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Atty: Timothy B. Clise
Reg. No. 40,957

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 29 day of June, 2007.

Name

Nicole J. van

Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
(GENERAL)

S/N 10/578,659PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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DIGITAL SIGNAL PROCESSING METHODS AND APPARATUS

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

INFORMATION DISCLOSURE STATEMENT

Serial No :10/578,659

Filing Date: May 09, 2006

Title: DIGITAL SIGNAL PROCESSING METHODS AND APPARATUS

Page 2

Dkt: 1365.105US1

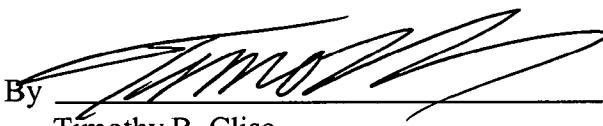
Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications, and Non-Published Applications identifiable by USPTO Serial Number, are no longer required to be provided to the Office. Notification of this change to this effect was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004 and October 19, 2004. Thus, Applicant has not included copies of any US Patents or US Patent Applications identifiable by serial number that may be cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,
EUAN CHRISTOPHER SMITH ET AL.

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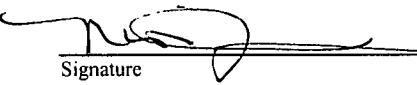
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Name Nicole Jare

Signature 

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>(Use as many sheets as necessary)</small>		Complete if Known Application Number 10/578,659 Filing Date May 9, 2006 First Named Inventor Smith, Euan Group Art Unit Unknown Examiner Name Unknown	
Sheet 1 of 3		Attorney Docket No: 1365.105US1	



ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NHB/

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-2002/0024513A1	02/28/2002	Kota, Atsushi, et al.	08/28/2001
	US-2002/0063671A1	05/30/2002	Knapp, Alan G.	11/08/2001
	US-2002/0083655A1	07/04/2002	Paul, William, et al.	03/22/2001
	US-2002/0158832A1	10/31/2002	Park, Tae-Kwang, et al.	02/25/2002
	US-2003/0018604A1	01/23/2003	Franz, Martin, et al.	05/22/2001
	US-2003/0193463A1	10/16/2003	Yamada, Fumiaki, et al.	05/06/2003
	US-2004/0125046A1	07/01/2004	Yamazaki, Tatsuro, et al.	10/08/2003
	US-2004/0150608A1	08/05/2004	Kim, Bong-Nam, et al.	12/17/2003
	US-2004/0169463A1	09/02/2004	Burn, Paul L., et al.	01/20/2004
	US-2004/0249615A1	12/09/2004	Grzeszczuk, Radek, et al.	12/21/2001
	US-2005/0218791A1	10/06/2005	Kawase, Takeo	06/01/2005
	US-2006/0001613A1	01/05/2006	Routley, Paul R., et al.	07/05/2005
	US-2006/0050032A1	03/09/2006	Gunner, Alec G., et al.	05/23/2005
	US-2007/0069992A1	03/29/2007	Smith, E. C., et al.	09/29/2005
	US-2007/0085779A1	04/19/2007	Smith, E. C., et al.	09/29/2005
	US-3,621,321	11/16/1971	Williams, Digby F., et al.	10/28/1969
	US-4,539,507	09/03/1985	VanSlyke, Steven A., et al.	03/25/1983
	US-4,672,265	06/09/1987	Eguchi, Ken, et al.	07/28/1985
	US-5,247,190	09/01/1993	Friend, Richard H., et al.	12/28/1990
	US-5,646,652	07/08/1997	Saidi, Ali	04/01/1996
	US-5,654,734	08/05/1997	Orlen, Noah P., et al.	05/26/1995
	US-5,684,502	11/04/1997	Fukui, Yasuhito, et al.	12/28/1995
	US-5,747,182	05/05/1998	Friend, Richard H., et al.	04/03/1995
	US-5,807,627	09/15/1998	Friend, Richard H., et al.	03/31/1995
	US-5,821,690	10/13/1998	Martens, Josef, et al.	04/22/1996
	US-5,965,901	10/12/1999	Heeks, Stephen K., et al.	11/26/1997
	US-6,014,119	01/11/2000	Staring, Aemilianus G., et al.	05/17/1996
	US-6,151,414	11/21/2000	Lee, Daniel D., et al.	01/30/1998
	US-6,201,520	03/13/2001	Iketsu, Yuichi, et al.	09/16/1998
	US-6,332,661	12/25/2001	Yamaguchi, Hiroshi	03/27/2000
	US-6,429,601	08/06/2002	Friend, Richard H., et al.	08/17/2000
	US-6,496,168	12/17/2002	Tomida, Takayuki	10/02/2000
	US-6,558,219	05/06/2003	Burroughes, Jeremy H., et al.	09/06/2000
	US-6,558,818	05/06/2003	Samuel, Ifor D., et al.	10/23/1998
	US-6,605,823	08/12/2003	Pichler, Karl, et al.	07/29/1997
	US-6,897,473	05/24/2005	Burroughes, Jeremy H., et al.	01/03/2002
	US-7,049,010	05/23/2006	Holmes, Andrew B., et al.	10/21/1998
	US-7,078,251	07/18/2006	Burroughes, Jeremy, et al.	10/10/2003
	US-7,125,952	10/24/2006	O'Dell, Richard, et al.	10/14/2003
	US-7,151,341	12/19/2006	Pichler, Karl, et al.	07/10/2003

EXAMINER

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DATE CONSIDERED

11/04/2009

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/578,659
		Filing Date	May 9, 2006
		First Named Inventor	Smith, Euan
		Group Art Unit	Unknown
		Examiner Name	Unknown
Sheet 2 of 3		Attorney Docket No: 1365.105US1	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NHB/

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T ²
	EP-0541295A2	05/12/1993	Tanioka, Hiroshi	
	EP-0581255A1	02/02/1994	Kuwata, Takeshi, et al.	
	EP-0621578A	10/26/1994	Fukui, Yasuhito, et al.	
	EP-0678844A1	10/25/1995	Fukui, Yasuhito, et al.	
	EP-1079361A1	02/28/2001	Tokunaga, Masahiro, et al.	
	EP-1091339A2	04/11/2001	Tomida, Takayuki	
	EP-1408479A2	04/14/2004	Yamazaki, Tatsuro, et al.	
	GB-2371910A	08/07/2002	Kawase, Takeo	
	GB-2381643A	05/07/2003	Smith, Euan C., et al.	
	GB-2388236A1	11/05/2003	Smith, Euan C., et al.	
	GB-2389952A1	12/24/2003	Routley, Paul R., et al.	
	WO-02067343A1	08/29/2002	Burn, Paul, et al.	
	WO-03079322A1	09/25/2003	Smith, Euan C., et al.	
	WO-03091983A1	11/06/2003	Smith, Euan C., et al.	
	WO-2004001707A2	12/31/2003	Trags, Alexander	
	WO-2004003877A2	01/08/2004	Hattori, Reiji	
	WO-2006035246A1	04/06/2006	Smith, Euan C., et al.	
	WO-2006035248A1	04/06/2006	Smith, Euan C., et al.	
	WO-9013148A1	11/01/1990	Friend, Richard H., et al.	
	WO-9506400A1	03/02/1995	Martens, Josef, et al.	
	WO-9921935A1	05/06/1999	Samuel, I., et al.	
	WO-9948160A1	09/23/1999	Burroughes, Jeremy, et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NHB/

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"United Kingdom Search Report for Application No. GB0524337.3", 1 Page	
		LEE, DANIEL D., et al., "Algorithms for Non-negative Matrix Factorization", Advances in Neural Information Processing Systems, Vol. 13, (2001), 556-562	
		LEE, DANIEL D., et al., "Learning the parts of objects by non-negative matrix factorization", NATURE, Vol. 401, (October 1991), 788-791	
		LUI, WENQUO, et al., "Existing and new algorithms for non-negative matrix factorization", http://www.cs.utexas.edu/users/liuwg/383Cproject/CS_383C_Project.htm , (2002)	
		SHAHNAZ, FARIAL, et al., "Document clustering using nonnegative matrix factorization", Information Processing and Management, (2004), 14 Pages	
		TANGSRIRAT, W., et al., "FTFN with variable current gain", Proceedings of IEEE Region 10 International Conference on Electrical and Electronic Technology, 2001. TENCON., Vol. 1, (2001), 209-212	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH /NHR/

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		VOGT, FRANK, et al., "Recent advancements in chemometrics for smart sensors", Analyst, Vol. 129, (2004), 492-502	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NHB/

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